

REMARKS

Claims 30-32 currently are pending. Claims 30-32 currently have been amended.

Applicants file the present amendment with a concurrent Request for Continued Examination.

The Examiner stated that no copy of a post card was received by the Office. Applicants again herein submit a copy of a USPTO date stamped post card acknowledging receipt.

Applicants believe all of the Examiner's formal objections were overcome by the last filed response or are improper and overly restrictive as lacking support in the rules. Applicants therefore respectfully request withdrawal of the Examiner's objections.

The Examiner stated that the rejection of claim 30 under 35 USC § 112, second paragraph, as being indefinite is maintained.

Applicants believe one of ordinary skill in the art would recognize that the language of claims 30-32 is not indefinite. The test for definiteness under 35 USC § 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). When the Examiner is satisfied that patentable subject matter is disclosed, and it is apparent to the Examiner that the claims are directed to such patentable subject matter, he or she should allow claims which define the patentable subject with a reasonable degree of particularity and distinctness. MPEP § 2173.02 (emphasis in the original).

The Examiner has maintained the rejection of claims 30-32 under 35 USC § 112, first paragraph, written description. Applicants believe the narrowing of the claim scope 95% homologous sequences should overcome the Examiner's rejection. The Examiner stated that the

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omission of the inclusion of the functional PDAT language necessitates the instant rejection. However, applicants point out that the subject matter of the present invention is a process for the production or for increasing the content of triacylglycerols in transgenic cells or organisms. The increase is due to the expression of SEQ ID NO: 1 from *S. cerevisiae* which encodes an enzymes with the amino acid sequence of SEQ ID NO: 2 in the host cell. Where the host cell is a yeast cell, overexpression of SEQ ID NO: 1 is necessary. The technical feature of said enzyme is that it catalyzes the transfer of fatty acids from phospholipids to diacylglycerol in an acyl-CoA-independent reaction.

Another way of increasing triacylglycerol content is with uncommon fatty acids such as medium chain patty acid, hydroxy fatty acid, epoxy fatty acid and acetylenic fatty acid, for example ricinoleic and vernolic acid by using the PDAT enzyme. PDAT does not synthesize de novo uncommon fatty acids but catalyzes the transfer from phosphatidylcholine to diacylglycerol to increase the total content of triacylglycerols with uncommon fatty acids in the cells.

Applicants submit the above argument as it applies to the enablement rejection as well.

The Examiner stated that the previous rejection of claim 30 is maintained because the claim reads on any transformed *S. cerevisiae*, not just *S. cerevisiae* transformed with SEQ ID NO: 1. Applicants respond by pointing out that claim 30 is directed transgenic cells and organisms.

The Examiner rejected claim 32 under 35 USC § 103(a) as being unpatentable over the combination of Verhasselt et al. and Zou et al. because Verhasselt et al. assign a putative acyltransferase function and Zou et al. obviate and motivate the methods using ORF N2042.

In response, applicants point out that Zou et al. teaches the use of sn-2 acylglyceride fatty

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acyltransferase to increase the content of triacylglycerols with uncommon fatty acids. As shown in table 1 and 19 of Zou et al., this enzyme catalyzes an acyl-CoA-dependent reaction. Verhasselt associates the ORF N2042 with a phosphatidylcholine-sterol O-acyltransferase, which means that Verhasselt did not recognize the function of the encoded enzyme. Said phosphatidylcholine-sterol O-acyltransferase catalyze the transfer of an acyl group from phosphatidylcholine to sterol, leading to a sterol ester, but not to a triacylglycerol. Therefore, applicants believe the Examiner has not met the requirements for establishing a *prima facie* case of obviousness.

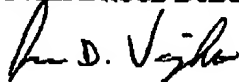
In view of the present amendment and remarks, applicants consider that the rejections of record have been obviated and respectfully solicit passage of the application to issue.

Applicants herein request a two month extension of time. The appropriate fee is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 14-1437. Please credit any excess fees to such deposit account.

Respectfully submitted,

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